

## **REMARKS**

Claims 1-11 and 21-27 are pending in this application. By this Amendment, the specification is amended by the attached substitute specification, claims 1-4, 6-8, 11, 21, and 24 are amended, and claims 26-27 have been added. The amendments are supported by the specification and the originally filed claims. In particular, the specification is amended to correct typographical errors and other informalities as requested by the Examiner, and to include an updated version of the amendments to the specification in the Preliminary Amendment filed January 30, 2004. A clean version and a marked-up version of the substitute specification are attached. Meanwhile, claims 1-4, 6-8, 11, 21, and 24 are amended to correct typographical errors and other informalities noted by the Examiner, to remove preferred information as requested by the Examiner, and for clarification of the scope of these claims. New claims 26-27 are directed to the preferred subject matter removed from claim 1. No new matter is contained in the amendments.

The specification and claims 2, 3, 8, and 21 are objected to for containing the asserted informalities. Applicant respectfully submits that these objections have been rendered moot by the amendments to the specification in the attached substitute specification and the above amendments to claims 2, 3, 8, and 21, which were suggested by the Examiner.

Claims 1-11 and 21-25 are rejected under 35 U.S.C. § 112, second paragraph, for the asserted indefiniteness in claims 1, 3, 4, 6, 7, and 11. Applicant respectfully submits that this rejection has been rendered moot by the above

amendments to claims 1, 3, 4, 6, 7, and 11. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

Applicant respectfully disagrees with the Examiner's assertion that "[t]his application currently names joint inventors" in the paragraph bridging pages 5-6 of the Office Action. In contrast, Applicant respectfully notes that Giovanni Pantini is the sole inventor of the subject matter of the present application.

Before commenting on the patentability issues raised by the Examiner, the Applicant wishes to explain the gist of the present invention. As noted by the specification, "[i]t is well known in the prior art that (per)fluoropolyethers due to their hydro- and oil-repellance and high filmogenic property are very good protective agents towards both hydrophilic and lipophilic irritating agents" (originally filed specification, page 2, third full paragraph). However, the specification also discloses that incorporation of (per)fluoropolyethers in polyphase systems, particularly three-phase emulsions, "require the presence of two essential components: mineral oils ... and emulsifiers ... The properties of both these components negatively affect the hydro-repellant and/or oil-repellant action of (per)fluoropolyethers having perfluoroalkyl end groups" (originally filed specification, page 3, third paragraph). Therefore, a key feature of the present invention is a monophase system composition, comprising: component A), which is a fluoropolyether phosphate according to present claim 1; component B), which is a solvent according to present claim 1; and component C), which is water (see, e.g., present claim 1). Applicants note that "[t]he composition of the present

invention appears as a monophasic clear solution" (originally filed specification, page 9, lines 2-3, and 19-22) (emphasis added).

Claims 1-8 and 23-24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hashimoto et al. (JP 9-111286). This rejection is traversed.

Applicant respectfully submits that the Examiner's assertions on page 6 of the Office Action with respect to the chemical structure of component A and the definition of L have been rendered moot by the above amendments clarifying the scope of claim 1.

Applicant also submit that the chemical definition given by the Office Action as to the formula of Hashimoto et al. (see page 6 of the Office Action) is merely a narrow interpretation. Hashimoto et al. does not teach or suggest a perfluoropolyether phosphate, as the R<sub>3</sub>, and R<sub>1</sub> end groups may have several different functional groups.

Amongst the surface active agents of Hashimoto et al., the Examiner cited "FONBRIN HC-04, is an exemplary commercially available perfluoropolyether that is compatible with oil, water, methanol, ethanol, isopropanol, propylene glycol, etc. ... Hashimoto indicates that the surfactant and oil agent are mixed with an alcohol, preferably with addition of the alcohol to the surfactant prior to the addition of the oil agent" (Office Action page 7, third full paragraph) (emphasis in original).

Applicants note that Table 1 of Hashimoto et al. discloses an "emulsion" composition (see, e.g., Hashimoto et al., paragraph [0035]). In contrast, as noted above, the monophasic of the present invention obtains a clear solution of the perfluoropolyether phosphate.

The Applicant remarks that those of skill in the art would not have found any teaching, suggestion, or motivation in Hashimoto et al. to select a perfluoropolyether phosphate instead of a perfluoropolyether with other functionalities, i.e., -OH terminated.

Applicant has shown in present (comparative) Example 4, that a PFPE diol does not form a clear solution.

Applicant further remarks that "FONBRIN HC-04" is cited in paragraph [0025] of Hashimoto et al. as "a commercial item of these fluorine system oils" (emphasis added). Therefore, FONBRIN HC-04 has no connection with the surfactant of formula 1 in claim 1 of Hashimoto et al.

Regardless, paragraph [0026] of Hashimoto et al. lists a large number of alcohols. Some of the listed alcohols are soluble in water and some of the listed alcohols are not soluble in water, e.g., tert-butanol and tert-pentanol. Therefore, as Hashimoto et al. discloses alcohols that are not soluble in water, Applicant submits that there is no teaching or suggestion in Hashimoto et al. to select alcohols suitable as the solvent of component B) of claim 1 of the present invention. The component B) (solvent) of Claim 1 of the present invention forms a clear solution (see the originally filed specification, page 9, lines 18-27) upon addition of component C) (water), which would not be obtained by with the addition of an alcohol that is not soluble in water.

In contrast, Applicant notes that glycerin is among the preferred alcohols of Hashimoto et al. The Applicant has demonstrated in the Declaration submitted during the prosecution of the parent case (see the amendment under 37 C.F.R.

1.111 dated August 8, 2003) that glycerin does not dissolve compound A) and therefore glycerin is not suitable for forming the composition of present claim 1.

As noted above, as Table 1 of Hashimoto et al. is directed to an emulsion composition (see paragraph [0035] of Hashimoto et al.), Applicant submits that it has nothing to do with the composition of claim 1 of the present invention. Therefore, Applicant submits that Hashimoto et al. does not teach or suggest that those of skill in the art select component B) of present claim 1, much less the clear solution of the present invention.

Also, the Applicant remarks that the technical problem of Hashimoto et al. is to emulsify, *i.e.*, to provide an emulsion composition containing an oil agent, in which the oil agent is emulsified without damaging its water repellency and/or oil repellency (Hashimoto et al., page 2, second full paragraph), because it is difficult for the silicone oil or fluorine oil to emulsify (Hashimoto et al., page 7, first full paragraph). In other words, the technical problem of Hashimoto et al. is to provide an emulsion with the same oil and water repellence as that of a pure fluorinated oil or silicone oil. Thus, the technical problem tackled by Hashimoto et al. is different from that of the present invention (see above).

Therefore, even considering Hashimoto et al., not only would those of skill in the art not be taught or otherwise be motivated at providing a monophasic composition of the present invention, but also they would not have been motivated, taught, or otherwise directed to solving the specific technical problem solved by the present invention, which is to provide a water and oil repellent clear solution.

Accordingly, Applicant submits that the present invention would not have been obvious to those of skill in the art in view of the disclosure of Hashimoto et al. Thus, Applicant respectfully request reconsideration and withdrawal of the rejection of claims 1-8 and 23-24 under 35 U.S.C. § 103(a) over Hashimoto et al.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) over Hashimoto et al. in view of Brunetta et al. (U.S. Patent No. 4,803,067). This rejection is traversed.

Please see the above discussion of Hashimoto et al.

Applicant respectfully submits that Brunetta et al. does not satisfy the deficiencies of Hashimoto et al.

Brunetta et al. discloses "compositions for cosmetics and dermatology" (Brunetta et al., Abstract) comprising "a perfluoropolyether liquid dispersed in an aqueous or organic phase immiscible with said liquid" (Brunetta et al., column 2, lines 18-19). Further, "[t]he emulsion in which the perfluoropolyether liquid is dispersed is an oil/water emulsion (O/W) or a water/oil emulsion (W/O)" (Brunetta et al., column 2, lines 27-28), or "a solid phase suited to form a gel" (Brunetta et al., Abstract and column 1, lines 49-50), which are "stable dispersions" (Brunetta et al., column 1, line 45), "suited to form a gel, suspended in an organic liquid phase" (Brunetta et al., Abstract).

As such, the technical problem tackled by Brunetta et al. is to provide stable water/oil emulsions containing a dispersed perfluoropolyether liquid (Brunetta et al., Abstract). In contrast, claims 9 and 10 of the present invention are directed to liquid compositions in the form of clear solutions, because the combination of components A, B, and C give a clear solution (see, e.g., page 9, lines 2-3 of the

originally filed specification). As Brunetta et al. directs those of skill in the art to compositions in the form of emulsions, Brunetta et al. teaches away from the clear solution of the present invention.

Applicant remarks that this rejection seems to be based upon an improper *ex post facto* or hindsight analysis, as a rejection may not use results shown in the instant application.

For at least these reasons, Applicant submits that the present invention would not have been obvious to those of skill in the art in view of the disclosures of Hashimoto et al. and Brunetta et al. Thus, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 9 and 10 under 35 U.S.C. § 103(a) over Hashimoto et al. and Brunetta et al.

Claims 1-10, 21-22 and 24 are rejected on the ground of non-statutory obviousness type double patenting over claims 1-3 and 15-19 of parent U.S. Patent No. 6,699,485 to Pantini. This rejection is traversed.

However, in order to expedite prosecution, Applicant intend to file a Terminal Disclaimer over U.S. Patent No. 6,699,485 in a Supplemental Amendment.

Accordingly, Applicant request withdrawal of the rejection of claims 1-10, 21-22 and 24 on the ground of non-statutory obviousness type double patenting over claims 1-3 and 15-19 of U.S. Patent No. 6,699,485.

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better

condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event that this paper is not timely filed, Applicants hereby petition for an appropriate extension of time. The fees for this extension, together with any additional fees that may be due with respect to this paper are hereby authorized to be charged to Deposit Account No. 01-2300, referencing docket number **108910-00118**.

Respectfully submitted,

**Arent Fox PLLC**

A handwritten signature in cursive script, appearing to read "Amy Schoenhard", written over a horizontal line.

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Enclosures: Substitute Specification (clean and marked-up versions)